REMARKS

Amendments

Claim 1 is amended to incorporate the recitation of claim 3, which is now cancelled. This amendment is being made to expedite allowance of the application. Applicants reserve the right to file a continuation application drawn to the cancelled subject matter.

As claim 3 has already been considered, the above amendment does not require further search by the Examiner. Moreover, the above amendment places the application in better condition for appeal. Entry of the amendment is therefore respectfully requested.

Restriction Requirement

In prior Office Actions, the Examiner has argued that the Restriction was being maintained because "claim 1 is considered to be either obvious or anticipated over Lang (U.S. Patent No. 3,222,444)" or that "claim 1 is either obvious or anticipated over Feibush et al. (EP 366,252)." However, while such rejections were previously presented, the most recent Office Action of April 2, 2004, withdrew these rejections. The only remaining prior art rejection is one based on a combination of Feibush et al. and Nakanishi et al. Thus, the basis for the Restriction has been eliminated. Rejoinder of the non-elected claims is proper.

Moreover, with respect to PCT Rule 13.2, all of the claims refer to the process of claim 1. Thus, all of the claims contain the special technical feature(s) as recited in claim 1. Unity is present. See, e.g., examples 8-17 of Annex B of the PCT Rules.

Thus, withdrawal of the Restriction is again respectfully requested. Applicants further request rejoinder of the non-elected claims.

Rejection under 35 USC §103 in view of Feibush et al. and Nakanishi et al.

Claims 1-4 and 9-15 are rejected as allegedly being obvious in view of the combination of Fiebush et al. (EP '252) and Nakanishi et al. (WO '256). This rejection is again respectfully traversed.

EP '252 describes a process for making porous rigid resin particles, i.e., organic particles, for use in chromatography processes. The process uses porous inorganic materials as templates particles.

On the other hand, WO '256 discloses a sol-gel process for producing inorganic porous materials for use in chromatography. In one aspect of the process, WO '256 uses an organic pore forming agent. In another aspect of the process, WO '256 uses a gel having three-dimensional interconnected phase domains, some rich in solvent and some rich in an inorganic component, wherein the inorganic component is used as the pore forming agent.

In the rejection, the Examiner combines the disclosures of EP '252 and WO '256 in a manner whereby the inorganic porous materials of WO '256 are used as a template material in the process of EP '252. Yet, nothing within the disclosures of either of the references suggests such a combination.

This asserted modification of the EP '252 process would require one of ordinary skill in the art to look to a completely different class of processes (i.e., production of inorganic porous material as opposed to production of organic particles) and then utilize a feature from this different class of processes in a manner that it is completely contrary to its intended function. Specifically, the modification would require one of ordinary skill in the art to use the final product of WO '256, i.e., the inorganic porous material, as a template material. Nothing within the rejection presents any rationale as to the motivation for why one of ordinary skill in the art would first seek out a different class of production processes and then utilize a material thereof in a manner contrary to its disclosed function.

The process of EP '252 is directed to a templating technique for forming porous organic particles. If, despite the lack of motivation to do so, one of ordinary skill in the art were to look to the pore forming techniques employed by WO '252, there would be no suggestion of a modification of the process of EP '252. Clearly, such a combination would not suggest applicants' claimed invention.

The Examiner argues that motivation exist to combine the disclosures because WO '256 discloses advantages for using column shaped mouldings, flat sheet mouldings and mesopores and macropores. These assertions concern shape and structure of a final product. They provide no motivation for turning to a completely different class of materials and using a product thereof in a manner which is opposite to its intended function.

In addition, neither EP '252 nor WO '256 suggests modifying a matrix moulding so as to include template molecules. It is self evident that WO '256 provides no such suggestion since the inorganic porous material described therein is a final product, not a template.

The use of template molecules, as described in Applicants' specification at page 8, lines 4-7, can bind to the matrix moulding and adopt a position of defined alignment,

resulting in the formation of cavities which are more defined and are able to undergo clearer and stronger interactions during chromatographic separation.

The inorganic monolithic materials having macro- and mesoporous disclosed by WO '256 are used to overcome the high flow resistance associated with beads, such as the particles described in EP '256. See, e.g., page 2, lines 18-25. As discussed previously, WO '256 is thus concerned with flow resistance and not the diffusion of a polymerizable material. WO '256 provides no suggest that a monomer solution can be effectively distributed within its inorganic porous matrix. Thus, WO '256 provides no suggestion of modifying the process of EP '252 by using monolithic materials in place of template particles.

In the recent Office Action, the Examiner argues that WO '256 discloses that its material has greater diffusion than ordinary gels, citing page 7, lines 14-21. This portion of the disclosure of WO '256 refers to a comparison of processes of producing inorganic porous materials using so-called "ordinary gels," that have no macropores but fine pores that are restricted three-dimensionally, and the disclosed process wherein the gel contains domains rich in solvent and phase domains rich in an inorganic component. Following solvent-exchange, for the "ordinary gels" the original pore structure is said to considerably remain. In the disclosed gel process, it is stated that a large fraction of the fine pores are restricted only two-dimensionally which permits "rapid and frequent contact of external solution with the fine pore structure." As a result, WO '256 disclose that the "fine pores can be completely eliminated parallel to the development of larger pores within a reasonable solvent exchange duration."

Thus, this portion of the disclosure refers to diffusion during production of the inorganic porous materials and compares it to previously known gel processes for making such materials. This disclosure does not suggest that final products of the WO '256 process, i.e., the inorganic porous materials of WO '245, would have acceptable diffusion to effectively distributed a monomer solution within its inorganic porous matrix so as to act as a template for the production of organic mouldings.

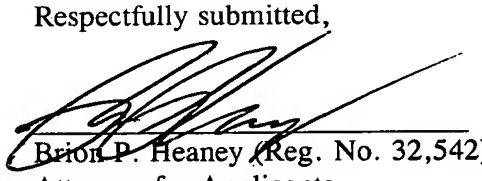
Also, the preparation of particulate materials as described in EP '252 cannot be compared with the preparation of monolithic materials as described in WO '256, which are of much greater dimensions. EP '252 provides no suggestion that its process of diffusing a polymerizable material into the template particles would be suitable in the case of much larger template materials, where diffusion would be expected to be slow and inhomogenous.

To further demonstrate the differences between flow resistance and diffusion, enclosed herewith is a Rule 132 Declaration by Dr. Dieter Lubda, one of the coinventors. This declaration also discusses the examples of Feibush et al. (EP '252).

In view of the above remarks, it is respectfully submitted that EP '252, taken alone or in combination with WO '256, fails to provide sufficient motivation which would lead one of ordinary skill in the art to modify the process of EP '252 in such a manner as to arrive at an embodiment in accordance with Applicants' invention. Therefore, withdrawal of the rejection under 35 USC § 103 is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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